

Date: Sun, 13 Feb 94 04:30:28 PST  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V94 #28  
To: Ham-Homebrew

Ham-Homebrew Digest Sun, 13 Feb 94 Volume 94 : Issue 28

## Today's Topics:

100hz tone board (2 msgs)  
Aluminium  
design questions (sort of long) (2 msgs)  
securing VXO coils, what glue?  
spot my transistor.

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 11 Feb 1994 20:49:43 GMT  
From: elroy.jpl.nasa.gov!swrindle!cs.utexas.edu!howland.reston.ans.net!  
sol.ctr.columbia.edu!news.columbia.edu!bonjour.cc.columbia.edu!mac20@ames.arpas  
Subject: 100hz tone board  
To: ham-homebrew@ucsd.edu

Actually I missed the beginning of this thread but concerning PL Tones, is there a simple chip or method that will decode PLs? I know there's the chip for DTMF from SSI but I'm wondering if there is something for sub-audible also.

Mike KF2NV

Date: Thu, 10 Feb 1994 19:30:13 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!sdd.hp.com!col.hp.com!  
news.dtc.hp.com!hplextra!hpcss01!markb@network.ucsd.edu

Subject: 100hz tone board  
To: ham-homebrew@ucsd.edu

check the back of QST, there are a couple of manufactures of nice little boards (about \$50 I think), you can build a simple 100Hz osc and inject that into your input audio, it is hard to build one that doesn't drift though, a Wein Bridge osc is OK but the XTAL controlled boards are better, I'd buy one, then you can change the freq if you need to, they have little jumpers or switches to set the correct PL,

the 100Hz needs to be about +/- 1 Hz, people on the air can help you set the deviation level.

good luck

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Date: Fri, 11 Feb 1994 19:22:50 GMT  
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!paladin.american.edu!  
constellation!osuunx.ucc.okstate.edu!olesun!gcouger@ames.arpa  
Subject: Aluminium  
To: ham-homebrew@ucsd.edu

In article <tgmCL01Dq.Ito@netcom.com>,  
Thomas G. McWilliams <tgm@netcom.com> wrote:  
>Jim Buchanan (c22jrb@kopt0002.DELCOELECT.COM) wrote:  
>: I'm looking for a mail-order source for aluminium  
>: sheets to be used in making panels and cases for  
>: homebrew eqpt. All local sources I can find have  
>: minimum orders geared towards manufacturing firms.

Junk yards often have surplus aluminium and odd size pieces. Watch for hardened Al sheet it breaks instead of bending. It can be annealed by heat.

Also try to find out who the local sources are selling to. And buy their scrap.

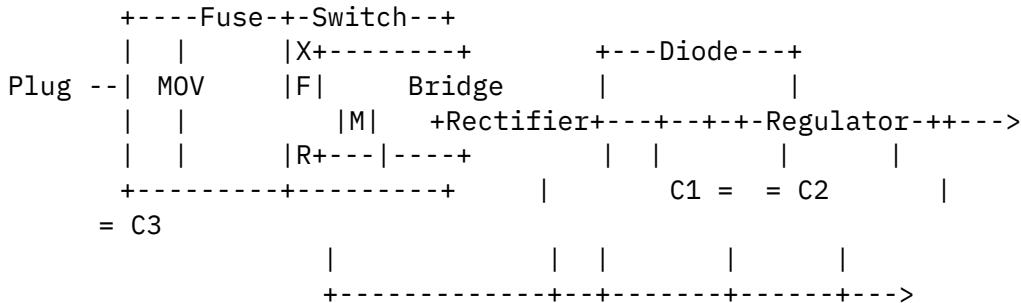
Gordon AB5Dg

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Date: 11 Feb 1994 20:02:37 GMT  
From: agate!msuinfo!cravitzma@ames.arpa  
Subject: Power supply design questions (sort of long)  
To: ham-homebrew@ucsd.edu

I am trying to design a regulated 12V power supply (to power my HT at

home) and need advice on the following (since it's been a long time since I have designed P.S's and am going from memory). Here is the circuit I have so far:



The secondary of the transformer is going to be around 14V 1.5 A, and the regulator will be a 7812.

My questions are:

- 1) Have I overlooked anything electrical-wise or safety-wise in the circuit? As I said, it's been a couple of years since I designed a P.S. and I was going from memory here.
- 2) What are the values of C1, C2 and C3? (Capacitor type, capacitance and voltage ratings)
- 3) Can the 7812 handle 1.5 - 2 A of current? If not, is there another fixed 12V regulator I can use (I don't want to use an adjustable regulator for reasons of cost and simplicity of circuit design)

If anyone can provide comments, suggestions, criticisms, pointers to references, etc, I would greatly appreciate it.

/Matthew N9VWG

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Matthew Cravit, N9VWG | All opinions expressed here are  
Michigan State University | my own. I don't speak for Michigan  
East Lansing, MI 48825 | State, and they don't speak for me  
E-Mail: cravitma@cps.msu.edu | (thank goodness).

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Date: Sat, 12 Feb 1994 17:13:54 GMT  
From: library.ucla.edu!europa.eng.gtefsd.com!emory!kd4nc!ke4zv!  
gary@network.ucsd.edu  
Subject: Power supply design questions (sort of long)

To: ham-homebrew@ucsd.edu

In article <2jgo8t\$17cu@msuinfo.cl.msu.edu> cravitma@cps.msu.edu (Matthew B Cravit) writes:

>  
> 3) Can the 7812 handle 1.5 - 2 A of current? If not, is there  
> another fixed 12V regulator I can use (I don't want to use an  
> adjustable regulator for reasons of cost and simplicity of  
> circuit design)

The standard 7812 can't handle that much current, it's rated at 1.5A max, but there are "high current" versions that can handle up to 5 amps. They're usually the ones in the T0-3 cases and have the 'K' suffix on their part numbers.

Gary

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|                             |  |              |  |                          |
|-----------------------------|--|--------------|--|--------------------------|
| Gary Coffman KE4ZV          |  | You make it, |  | gatech!wa4mei!ke4zv!gary |
| Destructive Testing Systems |  | we break it. |  | uunet!rsiatl!ke4zv!gary  |
| 534 Shannon Way             |  | Guaranteed!  |  | emory!kd4nc!ke4zv!gary   |
| Lawrenceville, GA 30244     |  |              |  |                          |

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Date: Wed, 9 Feb 1994 05:20:00 GMT  
From: netcomsv!netcom.com!tgm@decwrl.dec.com  
Subject: Securing VXO coils, what glue?  
To: ham-homebrew@ucsd.edu

asirene@ntuvax.ntu.ac.sg wrote:

: I am winding some coils for a VXO and want to know if  
: the "glue-gun" melted plastic is suitable for securing the coil  
: or if it is too lossy?

The classic solution is Q-dope made by dissolving polystyrene in a solvent. Polystyrene is plentiful but I can't remember the proper solvent. I made a gooey useless mess once when I used a less than optimal solvent. Acetone should work.

Thomas

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Date: Wed, 9 Feb 1994 05:12:51 GMT  
From: netcomsv!netcom.com!tgm@decwrl.dec.com  
Subject: spot my transistor.  
To: ham-homebrew@ucsd.edu

antonio gatta (st92ba44@dunx1.ocs.drexel.edu) wrote:  
: the most convenient place for me to get such pieces is at a local  
: radio shack. ..the catalog has a lot of transistors...all marked either NPN  
: or PNP. i haven't spotted a HEP 232 (?). which one do i need? it gives  
: no voltage specs or anything. can i use just any old NPN? any help would  
: be appreciated. thanks.

The HEP line was made by Motorola and I believe HEP means "Hobbyist and Experimenters Parts". My NTE book says it is equivalent to an NTE 121 a PNP power transistor in a TO-3 case, 30v c-e, 100 watts. It is also germanium. The closest radio shack equivalent would be a part # 276-2043. You might have to twiddle with the biasing slightly because the RS part is silicon. Generally transistors for this sort of application are pretty non-critical as long as you have the approximate power dissipation and collector voltage.

Thomas -- KI4N

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End of Ham-Homebrew Digest V94 #28  
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